



July 23, 2009

Charles L.A. Terreni
Chief Clerk and Administrator
South Carolina Public Service Commission
Post Office Drawer 11649
Columbia, South Carolina 29211

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mr. Terreni:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of June 2009.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Enclosures
45612

c: John Flitter (ORS)

June 2009

The following units had no off-line outages during the month of June:

Brunswick Unit 1
Brunswick Unit 2
Harris Unit 1
Robinson Unit 2
Roxboro Unit 3
Roxboro Unit 4

Mayo Unit 1

Full Forced Outage

- A. Duration: The unit was taken out of service at 11:42 on June 11, and was returned to service at 2:10 on June 12, a duration of 14 hours and 28 minutes.
- B. Cause: Generator Lock Out due to Defective Digital Output Board
- C. Explanation: The unit experienced a generator lock out due to a defective digital output board. This board is part of the turbine control system. The defective board was sending a false output signal to the metering and relay panel, which caused the generator lock out.
- D. Corrective Action: The digital output board was replaced, and trip tests were performed to ensure proper operation of the turbine emergency trip system. Upon completion of repairs, the unit was returned to service with boiler #1A in operation; thereby enabling the unit to operate at approximately half of its capability. Boiler #1B remained out of service following completion of the digital output board repairs in order to investigate a suspected boiler tube leak. Further inspections revealed that #1B boiler was experiencing issues due to a service air leak through a furnace exit gas temperature probe, rather than a boiler tube leak. Upon completion of repairs to address the service air leak on boiler #1B, the unit was able to return to full capability at 7:48 on June 14.

Roxboro Unit 2

Full Forced Outage

- A. Duration: The unit was taken out of service at 6:32 on June 1, and was returned to service at 16:27 on June 2, a duration of 33 hours and 55 minutes.
- B. Cause: Economizer Tube Leak
- C. Explanation: The unit was taken out of service to investigate and repair a tube leak in the economizer section of the boiler.
- D. Corrective Action: Weld repairs were made to correct the tube leak, and the unit was returned to service.

	Month of June 2009		Twelve Month Summary		See Notes*
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MDC	938 MW		938 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	679,293 MWH		8,113,555 MWH		2
Capacity Factor	100.58 %		98.74 %		
Equivalent Availability	100.00 %		96.73 %		
Output Factor	100.58 %		101.42 %		
Heat Rate	10,553 BTU/KWH		10,398 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	0	0.00	123,816	1.51	3
Partial Scheduled	27	0.00	33,527	0.41	4
Full Forced	0	0.00	93,206	1.13	5
Partial Forced	0	0.00	18,111	0.22	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	675,360		8,216,880		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	920 MW		929 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	611,706 MWH		6,343,465 MWH		2
Capacity Factor	92.35 %		77.99 %		
Equivalent Availability	91.20 %		77.32 %		
Output Factor	92.35 %		97.40 %		
Heat Rate	10,805 BTU/KWH		10,655 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,336,484	16.43	3
Partial Scheduled	132	0.02	46,363	0.57	4
Full Forced	0	0.00	274,292	3.37	5
Partial Forced	58,165	8.78	199,396	2.45	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	662,400		8,133,660		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	900 MW		900 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	659,020 MWH		7,261,479 MWH		2
Capacity Factor	101.70 %		92.10 %		
Equivalent Availability	100.00 %		90.15 %		
Output Factor	101.70 %		101.35 %		
Heat Rate	10,811 BTU/KWH		10,742 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	495,270	6.28	3
Partial Scheduled	0	0.00	52,237	0.66	4
Full Forced	0	0.00	224,235	2.84	5
Partial Forced	0	0.00	9,042	0.11	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	648,000		7,884,000		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	710 MW		710 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	526,657 MWH		5,396,386 MWH		2
Capacity Factor	103.02 %		86.76 %		
Equivalent Availability	100.00 %		82.78 %		
Output Factor	103.02 %		103.97 %		
Heat Rate	10,898 BTU/KWH		10,753 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	0	0.00	768,030	12.35	3
Partial Scheduled	0	0.00	38,498	0.62	4
Full Forced	0	0.00	247,080	3.97	5
Partial Forced	0	0.00	3,512	0.06	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	511,200		6,219,600		8

* See 'Notes for Nuclear Units' filed with the January 2009 report.

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	742 MW		742 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	353,713 MWH		3,923,646 MWH		2
Capacity Factor	66.21 %		60.36 %		
Equivalent Availability	93.87 %		86.36 %		
Output Factor	67.51 %		68.44 %		
Heat Rate	10,926 BTU/KWH		10,676 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	706,929	10.88	3
Partial Scheduled	0	0.00	63,873	0.98	4
Full Forced	10,314	1.93	59,928	0.92	5
Partial Forced	22,413	4.20	55,551	0.85	6
Economic Dispatch	147,800	27.67	1,689,993	26.00	7
Possible MWH	534,240		6,499,920		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

** Gross of Power Agency

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	662 MW		667 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	377,742 MWH		4,409,633 MWH		2
Capacity Factor	79.25 %		75.53 %		
Equivalent Availability	94.52 %		88.43 %		
Output Factor	83.17 %		84.62 %		
Heat Rate	8,822 BTU/KWH		8,880 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
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Full Scheduled	0	0.00	373,403	6.40	3
Partial Scheduled	0	0.00	38,079	0.65	4
Full Forced	22,453	4.71	209,054	3.58	5
Partial Forced	3,679	0.77	55,227	0.95	6
Economic Dispatch	72,766	15.27	753,476	12.91	7
Possible MWH	476,640		5,838,540		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	695 MW		700 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	341,048 MWH		4,168,482 MWH		2
Capacity Factor	68.16 %		67.98 %		
Equivalent Availability	99.21 %		93.58 %		
Output Factor	68.16 %		70.34 %		
Heat Rate	10,702 BTU/KWH		10,841 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	188,528	3.07	3
Partial Scheduled	0	0.00	97,830	1.60	4
Full Forced	0	0.00	11,996	0.20	5
Partial Forced	3,944	0.79	95,041	1.55	6
Economic Dispatch	155,408	31.06	1,570,494	25.61	7
Possible MWH	500,400		6,132,000		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

	Month of June 2009		Twelve Month Summary		See Notes*
MDC	698 MW		698 MW		1
Period Hours	720 HOURS		8,760 HOURS		
Net Generation	392,788 MWH		4,307,585 MWH		2
Capacity Factor	78.16 %		70.45 %		
Equivalent Availability	99.24 %		93.75 %		
Output Factor	78.16 %		74.82 %		
Heat Rate	11,948 BTU/KWH		10,846 BTU/KWH		
	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	299,151	4.89	3
Partial Scheduled	0	0.00	14,147	0.23	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	3,801	0.76	69,115	1.13	6
Economic Dispatch	105,971	21.09	1,424,482	23.30	7
Possible MWH	502,560		6,114,480		8

* See 'Notes for Fossil Units' filed with the January 2009 report.

** Gross of Power Agency

Plant	Unit	Current MW Rating	January 2008 - December 2008	June 2009	January 2009 - June 2009
Asheville	1	191	67.84	71.08	74.98
Asheville	2	185	64.83	60.19	63.39
Cape Fear	5	144	69.98	67.67	72.49
Cape Fear	6	172	61.62	73.89	62.50
Lee	1	74	62.88	78.28	49.64
Lee	2	77	50.49	56.00	41.32
Lee	3	246	38.21	65.71	63.69
Mayo	1	742	62.59	66.21	57.94
Robinson	1	174	65.88	52.20	63.04
Roxboro	1	369	69.79	75.98	84.35
Roxboro	2	662	78.24	79.25	77.41
Roxboro	3	695	66.00	68.16	68.16
Roxboro	4	698	70.32	78.16	69.94
Sutton	1	93	46.46	59.61	34.65
Sutton	2	104	55.49	57.59	43.21
Sutton	3	403	56.73	50.79	50.87
Weatherspoon	1	48	42.83	5.66	13.63
Weatherspoon	2	49	41.04	8.76	18.06
Weatherspoon	3	75	56.58	26.34	24.08
Fossil System Total		5,201	64.48	67.05	64.19
Brunswick	1	938	85.33	100.58	101.42
Brunswick	2	920	95.43	92.35	63.36
Harris	1	900	98.94	101.70	88.25
Robinson Nuclear	2	710	87.02	103.02	104.90
Nuclear System Total		3,468	91.90	99.19	88.62
Total System		8,669	75.45	79.91	73.96

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of $\geq 92.5\%$ during the 12 month period under review. For the test period April 1, 2009 through June 30, 2009, actual period to date performance is summarized below:

Period to Date: April 1, 2009 to June 30, 2009

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period A = 6,337,386 MWH

B. Total number of hours during SCPSC test period B = 2,184 hours

C. Nuclear system MDC during SCPSC test period (see page 2) C = 3,468 MW

D. Reasonable nuclear system reductions (see page 2) D = 1,357,400 MWH

A. SC Fuel Case nuclear system capacity factor: $[(A + D) / (B + C)] * 100 = 101.6\%$

NOTE:

If Line Item E $> 92.5\%$, presumption of utility's minimum cost of operation.

If Line Item E $< 92.5\%$, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: April 1, 2009 to June 30, 2009

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC	938 MW	920 MW	900 MW	710 MW	3,468 MW
Reasonable refueling outage time (MWH)	0	632,331	495,270	0	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	62	136,056	0	22,048	
Reasonable coast down power reductions (MWH)	0	0	24,856	0	
Reasonable power ascension power reductions (MWH)	0	20,440	20,300	0	
Prudent NRC required testing outages (MWH)	6,037	0	0	0	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	0	0	0	0	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	6,099	788,827	540,426	22,048	
Total reasonable outage time exclusions [carry to Page 1, Line D]					1,357,400